Mentored High School Summer Research Program

Grant Award Details

Mentored High School Summer Research Program

Grant Type: SPARK

Grant Number: EDUC3-08404

Project Objective: The project objective is to manage the SPARK program that provides 8 week stem cell research internships for high school students. The Program Director was in charge of recruiting students from underprivileged communities, place these students in stem cell research labs at leading institutions in California, and train the students in stem cell science and research techniques. The PDs were also responsible for implementing the CIRM social media guidelines which included having students post pictures about their internship experience on Instagram and write a blog. They also had to coordinate a patient engagement activity where students get first hand experience with patients and what they go through. Lastly the PDs had to coordinate their students attendance at the 2016 SPARK conference, making sure that their poster presentations and speeches were prepared.

Investigator:

Name:	Virginia Mattis
Institution:	Cedars-Sinai Medical Center
Type:	PI

Award Value: $316,842

Status: Active

Grant Application Details

Application Title: Mentored High School Summer Research Program

Public Abstract:

The CIRM SPARK program will be an intensive research experience for eight local high school students. This summer research training will be a prodigious addition to our existing high school outreach program, which has a track record of over 5 years of success in educating students from diverse cultural and socio-economic backgrounds, including classroom lectures, hosting field trips and an existing one-week summer research program. As a part of the SPARK program, the summer interns will receive eight weeks (~31 hours per week) of hypothesis-based mentored research in one of the fifteen labs in our institute, all focused on the use of stem cells for translational studies in regenerative medicine, with the hopes of accelerating delivery of stem cell based therapies to patients with unmet needs. In addition to their research projects, students will receive a comprehensive research education. Students will spend at least one day learning about the inner workings of organizing/ running a clinical trial and shadowing physicians/nurses in an ALS clinic to interact with patients. During their eight weeks they will also visit various core facilities (comparative medicine and imaging) to learn more about the research process and will receive lectures from various faculty. The students will be expected to attend their host labs' weekly journal clubs and lab meetings. They will also meet weekly in a group course to learn about different career paths in science and medicine, scientific reading, writing and presentations. Lastly, the students will attend a speaker series geared towards research interns and present posters of their summer research at Research Intern Day, both organized by our Institution. Here the students will get to know other summer interns and present their data. Our vision is that the students involved in this summer research internship will learn the power of regenerative medicine and gain experience that will propel them forward to a successful scientific career. Additionally, through the use of social media, we hope that reports of this research also informs the citizens of California of the uses of stem cells for regenerative medicine and inspires other young people to become involved in research.

Statement of Benefit to California:

This research program will benefit the State of California and its citizens by 1) introducing high school students from diverse cultural and socio-economic backgrounds to the exciting world of regenerative medicine, 2) training them to become the next generation of scientists and 3) administrative and student community outreach via social media to inform all California citizens of the potential of stem cells and regenerative medicine. First, our existing high school outreach program has a track record of over 5 years of success in educating students from diverse cultural and socio-economic backgrounds. We plan to continue forward with the addition of the SPARK summer program to recruit local high school students for summer internships from diverse backgrounds. Second, these summer internships will then be used to train 8 high school students to inspire them to become part of the next generation of research scientists with a particular interest in the potential of regenerative medicine. Lastly, through posting updates and blogs on CIRM's website, our institution's website and through other social media outlets such as Instagram and Facebook, this program will be a platform to educate the public of California at large about the potential of regenerative medicine via the use and study of stem cells for translational therapies.
